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ABSTRACT

The education reform movement has inspired an impressive array of school improvement programs. This article categorizes these intitiatives, summarizes policy directions, explores recent state curriculum guidelines and Northwest trends, and discusses implementation challenges. According to an Education Commission of the States study, most initiatives focus on the classroom as the unit of change, require districts and schools to establish clear academic goals, and involve collections of student data to measure progress. The 50-state study also notes trends such as major reforms and funding increases in California and Florida and a focus in other states on decentralization, database research, curriculum alignment, basic skills, and business and political involvement. Guidelines differ, but most states are moving toward establishing detailed, skills-oriented, common learning curricula on which to base standards. Northwest and Pacific states' efforts echo these trends; information is given for Oregon, Alaska, Hawaii, Washington, Idaho, and Montana. Success of school improvement efforts will depend on how effectively state, district, and school levels work together and on interactions among policy, management, and service areas at each level. Raising curriculum standards may have both positive and negative effects on students. Along with higher achievement levels, schools might be facing increased numbers of droputs, more stratification, and less student choice. Included are 3 figures and 16 references. (MLH)

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STATE CURRICULUM STANDARDS AS A SCHOOL IMPROVEMENT STRATEGY

by

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PREFACE

During the past several years, there has been substantial professional and public interest in the improvement of education, particularly public education. Prominent among attempts at improvement have been state policy actions. In an earlier work (Savard, 1986), NWREL suggests that these state level approaches can be categorized into three classes: (1) the establishment of new or revised state standards, (2) a re-emphasis or modification of regional accreditation procedures, and (3) special school improvement projects. While these categories are not necessarily mutually exclusive, they are different enough to provide a heuristic framework for the analysis of one of the most important educational movements of our time--the widespread attempt to improve our nation's schools.

The Northwest Regional Educational Laboratory is particularly interested in these state strategies for school improvement and how they affect districts and schools. Savard focused his analysis on the three categories described above, and discussed issues and implications of each. Other agencies have also begun to examine this area. For example, the Education Commission of the States (ECS) in a 1985 study divided state strategies for improving educational quality into two broad categories: upgrading specific skills for teachers and administrators, and increasing local school capacity to change. Currently, ECS is looking at a third category: curriculum improvement, which targets the content of curriculum and the assessment of results at both the district and school levels.

NWREL believes that while attention to curriculum standards is enjoying a rebirth of interest, there has been little attention to that area as a specific improvement strategy. Several approaches are being implemented by states in the Northwest and the Pacific, as well as elsewhere. These include the specification of "common learnings" for all students. Therefore, we have chosen to focus NWREL's current examination of standards on the curriculum area. It is our intent to stimulate thought and discussion among educational policy makers as they consider the establishment and implementation of curriculum standards. We hope to contribute to a tighter connection among state, district and school building curriculum standards, which will surely result in the improvement of schools.

Rex Hagans
April, 1986

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1. INTRODUCTION

The education reform movement of the 80s has seen states assuming a more and more active role in their attempts to improve the quality of schooling. The array of state-initiated school improvement programs is impressive and exceedingly broad. Examination of policy options requires both a consistent categorization and an analysis of emerging issues. "Policy" is a term often applied rather generally to any statement about beliefs or operating plans. It may be helpful to think of policy more precisely as a statement of direction, distinguishing it from underlying assumptions, from which it derives, and from the practices and procedures to which it leads.

Seen as a direction, policy statements serve several useful purposes. They point broad statements of belief toward an action level. They serve to arouse and focus public interest to highlight strong convictions, to clarify priorities, to make commitments, and to provide a baseline against which future actions may be judged. Policies thus viewed are essential to program operation and program success.

Figure 1 presents a useful display of school improvement initiatives by category. The Education Commission of the States (ECS) study which produced this 50-state survey (State Programs of School Improvement, ECS 1983) points out that commonalities do exist:

1. Most initiatives focus on the classroom as the unit of change, in response to research findings which indicate the school building is the appropriate place for the development and implementation of school improvement plans.

Figure 1:

SCHOOL IMPROVEMENT PROGRAMS IN THE STATES

State	School Improvement Program	Effective Schools Projects	District/ School Planning Requirement	Local Instruction Program Review	New Curriculum Development Efforts	New Accreditation Standards	Dissemination or Adoption Assistance	Technical Assistance Through Intermediate Units	Statewide Mandate for Student Testing
Alabama	AL			AL			AL	AL	AL
Alaska	AK	AK	AK*		AK*		AK		
Arizona				AZ					AZ
Arkansas	AR				AR		AR		AR
California	CA		CA	CA	CA		CA	CA*	CA
Colorado	CO		CO	CO		CO	CO	CO*	CO
Connecticut	CT	CT*	CT*	CT*	CT*	CT*	CT	CT	CT*
Delaware	DE	DE	DE	DE*	DE		DE		DE
Florida	FL		FL	FL	FL				FL
Georgia	GA			GA			GA	GA	GA
Hawaii	HI*						HI		HI*
Idaho	ID				ID*	ID	ID*		ID
Illinois	IL*				IL*		IL		
Indiana				IN*					IN*
Iowa			IA*				IA	IA	
Kansas	KS*				KS		KS		KS
Kentucky	KY		KY			KY			KY
Louisiana	LA*	LA*	LA*		LA				LA
Maine	ME*	ME*			ME		ME		
Maryland	MD		MD	MD	MD		MD	MD	MD
Massachusetts	MA		MA				MA	MA	MA
Michigan	MI	MI	MI	MI				MI*	MI
Minnesota	MN		MN	MN	MN		MN	MN	
Mississippi			MS			MS			MS*
Missouri	MO		MO			MO	MO		MO
Montana	MT*	MT*		MT	MT	MT	MT		
Nebraska					NE		NE		NE
Nevada					NV*				NV
New Hampshire			NH*				NH*		NH
New Jersey	NJ*	NJ*	NJ	NJ	NJ*	NJ	NJ*	NJ	NJ
New Mexico				NM	NM*				NM
New York	NY*		NY	NY		NY	NY	NY	NY
North Carolina							NC*	NC	NC
North Dakota	ND				ND*	ND	ND		
Ohio	OH*	OH*	OH*	OH*	OH*	OH*	OH*		OH*
Oklahoma	OK*			OK*	OK				
Oregon	OR*		OR	OR	OR	OR*	OR*		OR
Pennsylvania	PA		PA	PA	PA	PA	PA	PA	PA
Rhode Island	RI		RI		RI		RI		RI
South Carolina	SC*	SC*	SC*		SC*				SC
South Dakota	SD	SD	SD		SD			SD	
Tennessee	TN		TN	TN*	TN		TN	TN	TN
Texas	TX*	TX	TX	TX*	TX*	TX		TX	TX
Utah	UT*				UT		UT	UT*	UT
Vermont	VT	VT*			VT	VT	VT		VT
Virginia	VA*	VA*		VA*	VA*	VA			VA
Washington	WA	MA*	MA	MA		MA*	MA*	MA*	MA
Wisconsin			WI*	WI*	WI*			WI*	WI
Wyoming			WY*					WY*	

* new or expanded activities since 1983 survey
Source: State Programs of School Improvement, A 50-State Survey, ECS, 1983.

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2. Most initiatives include requirements for districts and schools to establish clear academic goals and then directly relate those goals to the curriculum and instructional program. This is also in response to research findings which indicate that clear statements of mission help to focus resources and produce better performance in achieving those objectives.

3. Most initiatives involve collections of student-level data to evaluate student progress in achieving academic goals and to modify the curriculum and instructional program. Again, this is in response to research findings which indicate that individual performance needs to be tracked over time to identify successes or failures and to determine if changes are necessary in the curriculum or instructional strategies.

The ECS study also notes there are emerging trends which should be attended to. These include:

1. To alleviate fiscal pressures, some states, such as California and Florida have passed major education reform packages with large increases in funcing. Other states such as Arkansas, South Carolina, and Tennessee are seriously considering raising the sales tax to finance school improvement efforts. These funds are earmarked for curriculum development activities as well as for high school graduation requirements, new testing programs, and master teacher programs.

2. More states are looking to assist districts and schools with curriculum improvement efforts through new or strengthened decentralized structures such as regional resource centers, or intermediate service units.

3. More states are involved in research to develop data bases for education policy makers to draw from in meeting the needs of individual schools for improved curriculum.

4. Some states, such as Alaska, are focusing their efforts on the alignment of curriculum including academic goals, objectives, textbooks, and tests.

5. Some states are expanding their vision to the secondary school; while most initiatives have primarily dealt with basic skills curriculum at the elementary level, more states are beginning to pay attention to a more rigorous secondary curriculum and graduation requirements.

6. Some states are involving business, industry, and political leaders in their curriculum improvement efforts to help make the educational system more responsive and effective.

Analysis of these state efforts and trends are important as a guide to their further development. Several approaches have recently emerged. A recent NWREL study (Savard, 1986) describes three broad state strategies used to improve the quality of education. These are: regional accreditation, school improvement projects, and state standards and regulations.

Savard's analytic approach focuses primarily on the school unit. The Education Commission of the States, in a recently completed study, divided state strategies for improving quality into two broad categories: instructional improvement efforts which concentrate on upgrading specific skills of teachers and administrators, and school improvement efforts which focus on developing an increasing local school capacity to change. Since that time, ECS has become interested in a third category, curriculum improvement, which targets the content of curriculum and the assessment of results at both the district and school levels. Within this latest effort, establishing state standards and regulations for a curriculum which provides "common learnings" for all students is one of the specific areas of inquiry.

NWREL proposes to focus its inquiry on development of state curriculum standards as a school improvement strategy. While the curriculum and instruction focus is not a totally new one for state standard setting, there are subtle, but important new emphases. Student assessment is one. Having grown steadily since the 1970s, it has expanded rapidly as the quality concerns of the 80s have emerged. Student assessment has already received a great deal of attention by NWREL and others. For example, Purposes, Issues, and Options for Statewide Student Testing (Estes, 1985)

looked at statewide standardized testing from three designated perspectives. While assessment cannot be separated from curriculum, the center of attention here will be state standards for what is to be taught as a state strategy for school improvement.

States traditionally have established required courses and time to be devoted to instruction in specific areas. Recently, a great deal of attention has been devoted to re-examination of this type of curriculum standards, often resulting in the addition of a few courses in "the new basics" or adding additional courses or time to areas viewed as especially critical, such as science or foreign languages. However, a small but growing amount of attention is being given to the potential influence of specifying, in some detail, the "common learnings" of what is to be taught to all students across the entire curriculum.

This paper intends to complement existing policy analyses work by NWREL, ECS, and others by examining the nature of this new curriculum emphasis, particularly in the Northwest states and Hawaii. In addition, we intend to look at the implications of setting such curriculum standards for the roles of the state, district, and school in building a coherent curriculum structure that leads to the ultimate goal: improved student achievement.

11. THE NATURE OF STATE CURRICULUM STANDARDS

Beginning in the 1970s, states have increased their efforts to establish curriculum standards, sometimes referred to as state guidelines for instruction; curriculum frameworks; learning outcomes or objectives; or scope and sequence guides. Many states have chosen to concentrate on curriculum standards for purposes of accountability, or uniformity and continuity of instruction. Indeed, in the last five years, 39 states have initiated curriculum reform (26 states in 1983) to include new laboratory equipment, model curriculum, strengthened core curriculum, computer education programs, new textbook adoption policies, and local course-content requirements (Action in the States 1984). The Education Commission of the States (1985) put state efforts to develop curriculum guidelines into context:

> Initially, states developed guidelines primarily as a basis for textbook selection or as performance objectives for minimum competency testing. But more recently, states have developed standards to help define a curriculum to achieve excellence. For example, California and Texas have developed general frameworks that incorporate the latest thinking on quality subject-area content; e.g., higher order thinking skills and writing skills. West Virginia has developed specific learning outcomes to define the core values of high-quality educational offerings and to equalize instructional opportunities.

In addition, current ideas regarding quality content and higher order thinking skills are incorporated into the curriculum frameworks of Connecticut and New Jersey to upgrade the curriculums in those states. In bellwether states such as Florida, the curriculum is moving toward statewide standardization; Utah will emphasize higher-order thinking skills in the junior highs. Other states concentrate only on the basic

skills and then tie those skills to minimum competency testing programs. Clearly, there appears to be a strong and growing movement toward establishing detailed, skills-oriented, common learnings curriculum on which to base standards. This trend seems to stem from the necessity to guarantee consistency and accountability at a level of detail where an impact on student performance is likely to occur. Though the trend is older and more developed at the district level, it is now also emerging strongly at the state level.

The common learnings curriculum approach has a great deal of support from groups across the spectrum of education. For example, in 1983, the Association of California School Administrators proposed to take a leadership role in coordinating and developing detailed course competency statements:

> We believe that specifying a certain number of years of academic course work will not in and of itself increase student achievement. We believe that increasing student achievement across the entire range of performance should and can be accomplished by specifying uniform course competency statewide and using attainment of these competencies at specified checkpoints.

The Association emphasized "the need for consistency and accountability of student performance across the state." Support for a common learnings curriculum also has the support of private groups around the country such as the Washington Roundtable which released their study of education in July, 1984. The study contains strong indicators that a more sophisticated understanding of a common learnings curriculum is growing outside the profession.

The movement toward "common learnings and skills" is occurring across the levels of the educational system but in a somewhat uneven fashion. While many high schools are moving toward them, the linkage of common learnings and skills to standards is often implicit rather than specific. In addition, the common areas identified by individual schools or districts do not always match those being considered by the states, raising significant issues for implementation.

III. NORTHWEST AND PACIFIC TRENDS IN SETTING STATE CURRICULUM STANDARDS

The Northwest and Pacific region served by NWREL contains six states, each with a diverse set of needs. All have existing standards and regulations for curriculum and most have recently reviewed those as part of a large state initiative to improve schools. Individual state activities are as follows:

Oregon: In 1984, graduation requirements for freshmen entering high school for the 1984-85 school year (graduating class of 1988) were revised to include an additional unit of mathematics, and an additional unit of science. The total number of unit requirements was raised from 21 to 22. Currently, the 22 units must be fulfilled as follows:

3 Language Arts (to include the equivalent of 1 unit in written composition)
2 Mathematics
2 Science
1 U.S. History
1 Global Studies
1/2 Government
1 Health Education
1 Physical Education
1/2 Career Education
1 Personal Finance and Economics
1 Applied Arts, Fine Arts, or Foreign Language (1 unit shall be earned in any one or a combination of these)

Competence requirements have been included in the Oregon standards to ensure that all students have attained the capacity to function at least at a basic level when they leave school. They are included as a curriculum requirement to assure that students and schools are clear about expectations to be reached by the end of 12 years of schooling. In the Oregon standards, each student shall demonstrate competence in reading, writing, mathematics, speaking, listening, and reasoning.

The state mandates the subject areas to be taught in grades 1-8. At the secondary level, schools must also provide educational opportunities that allow students to satisfy the high school graduation requirements including applied arts, vocational education, foreign language, and fine arts.

As a further measure to define curriculum standards for Oregon's students, the Oregon State Board of Education adopted the Oregon Action Plan for Excellence (1984) which identifies seven areas of improvement, one of which called for a statewide definition of what students should learn:

> The Oregon Department of Education, working with local school districts and higher education institutions, shall define the required common curriculum goals for elementary and secondary schools in terms of the learning skills and knowledge students are expected to possess as a result of their schooling experience. Local school districts, with assistance from the Oregon Department of Education, shall be responsible for organizing the curriculum and delivering instruction to achieve the common curriculum goals.

The first stage in defining the common curriculum goals was to develop the Essential Learning Skills--the basic skill and performance expectations for all students in the areas of reading, writing, speaking, listening, mathematics, reasoning, and study skills. The second and present stage is to develop Common Knowledge and Skills in individual subject areas. Together with the Essential Learning Skills, these form the Common Curriculum Goals for all students:

Essential Learning Skills + Common Knowledge and Skills	= Common Curriculum Goals

The Essential Learning Skills are considered basic to all student learning and all teachers are expected to provide instruction in these skills. They serve to replace the competency requirements. Essential Learning Skills are not specific to any one discipline but provide an integration of skills across all disciplines. Furthermore, the skills do not grow in isolation from content; they are strengthened through practice and use in all subject areas.

Oregon remains a local-control state. The Essential Learning Skills have been defined in concert with teachers and the means to meet those ends remain under the jurisdiction of local districts.

Alaska: The State Board of Education, in 1984, revised high school graduation requirements effective for the graduating class of 1985. Before graduation, students must have earned at least 21 units of credit in the following areas:

4 Language Arts
3 Social Studies
2 Mathematics
2 Science
1 Health/Physical Education
9 Electives

Moreover, the State Board of Education passed a regulation in June, 1984 that established expectations for school districts in regard to curriculum. The regulation requires the alignment of curriculum, instructional practices, and assessment with the goals of the district. The Alaska State Regulations on Curriculum, Instruction, and Assessment require the governing body of a district to adopt a curriculum which describes what students in grades K-12 will be taught. The curriculum must contain at least:

- A statement that the document is to be used as a guide for planning instructional strategies.

- A statement of goals that the curriculum is designed to accomplish.
- Content which can reasonably be expected to accomplish the goals.
- A description of a means for evaluating the effectiveness of the curriculum.

To assist districts in their curriculum development efforts, the Alaska State Department of Education has developed a model curriculum in all subjects for grades K-12 under mandate from the State Board of Education. Local districts may adopt or adapt this curriculum, but ultimately, must have the curriculum adopted by the local governing board.

A built-in review cycle provides a focus to assure that the curriculum is written, evaluated, and reviewed regularly. Most districts now have an ongoing, six-year review cycle in place, as specified in the regulations. Some districts have altered their local cycles to coordinate with the statewide review cycle initiated by the Department of Education. The statewide cycle will emphasize content areas in this order:

1985-86	Math, Health, Physical Education
1986-87	Science, Social Studies
1987-88	Language Arts, Fine Arts (visual, dance, drama)
1988-89	Foreign Language, Computer Education
1989-90	Fine Arts (music), Kindergarten
1990-91	Interdisciplinary Emphasis, regulation review

Hawaii: The State Board of Education in 1978 enacted graduation requirements effective for the graduating class of 1983. Twenty units are required in the following areas:

4 English/Language Arts
4 Social Studies
2 Mathematics
2 Science
1-1/2 Physical Education/Health
6 Electives
1/2 Guidance

The 1983 legislation also requires seniors to receive computer experience before they graduate.

Curriculum in Hawaii is centrally developed by the state and revolves around Performance Expectations which are statements of competencies expected of a range of students at certain grade levels. Each Performance Expectation specifies a demonstrable behavior which requires the application of knowledge, skills, or attitudes. Performance Expectations, in turn, are derived from the Foundation Program which requires schools to teach the basics and includes the core program of mathematics, science, social studies, English/language arts, physical education/health, and guidance. The Foundation Program includes eight objectives which have been established by the Hawaii State Department of Education to provide the basis for curriculum planning and development throughout the state. They include:

1. Develop basic skills for learning and effective communications with others.
2. Develop positive self-concept.
3. Develop decision-making and problem-solving skills consistent with the student's proficiency level.
4. Develop independence in learning.
5. Develop physical and emotional health.
6. Recognize and pursue career development as an integral part of personal growth and development.
7. Develop a continually growing philosophy that reflects responsibility to self as well as to others.
8. Develop creative potential and aesthetic sensitivity.

Performance expectations are an extension of these objectives in each of the subject areas and were developed to guide classroom instruction and improve instructional programs. They provide the framework for curriculum development at the school, district, and state levels. On the basis of the Performance Expectations, student needs are diagnosed and instructional experiences are prescribed. The Performance Expectations do not cover all the competencies expected of students for each instructional area. Rather, they give the critical student behaviors which are essential to each of the Foundation Program Objectives.

Although Hawaii, as a single statewide system, differs from other state agencies, the DOE recognizes the value and need for local determinations in initiating and sustaining curriculum improvements. Therefore, many of the curriculum changes seek broad school-level input and development of local operational policies in keeping with state directions. Among these are the following:

- o Development of curriculum links between the revised Performance Expectations and subject areas. Teachers are contributing sample instructional objectives/statements which reflect the relationship of classroom activities to the desired, common learnings.

- o Revision of Promotion Policy and Regulations (effective 9/85). Promotion standards have been made more specific with reference to basic skills development and, for grades 7 and 8, successful completion of six core subjects. Emphasis, however, is on the need for schools to establish systematic procedures for communication, review, instructional improvement and appropriate student placement.

- o Proposal to revise Homework Policy and Regulations. Revisions will be submitted to the Board for consideration. There is a strong recommendation that detailed policies and procedures be developed at the school level with the involvement of parents, as well as staff.

- o Grade Point Requirement for participation in student activities. The Board of Education, as part of its focus on improving academic achievement, passed a requirement of 2.0 gpa for students to participate in student activities (including athletics).

- o Proposal to provide large high schools with curriculum coordinators. With the emphasis on effective schools and the statewide directions for improvement, a funding proposal is being presented to the Board for curriculum coordinators in large high schools. These positions represent much needed assistance to school principals in strengthening instructional leadership.

Policy on instructional time required to teach the core program is broad. On the secondary level, 20 Carnegie units are required; at the elementary level, time is left to the teachers' discretion; at the intermediate level, instructional time is structured by courses, much like the Carnegie system. Students must also pass the Hawaii Test of Essential Competencies, in addition to fulfilling the curriculum requirements.

The Department is currently in the process of revising the Performance Expectations for each of the Foundation Program Objectives. An initial list of 27 statements of essential competencies was submitted for public validation. Fifteen are now required for graduation. Recently, the Board also passed a regulation that requires foreign language to be taught in grades 3-6.

Washington: In May, 1985, the Washington State Board of Education established rules and regulations to implement statutory amendment to the courses required for graduation, bringing the total to 18 credits (1 credit = 1 year's work) to be fulfilled as follows:

3 English
2-1/2 Social Studies (to include 1 United States History and Government; 1/2 Washington State History and Government; and 1 Contemporary World History, Geography, and Problems)

1 Occupational Education
2 Physical Education
5-1/2 Electives
2 Mathematics
2 Science

These requirements are applicable to all students who begin the ninth grade after July 1, 1985. In addition, students entering the ninth grade after July 1, 1987 will be required to complete an additional one credit from fine, visual, or the performing arts, any subject set forth in the graduation requirements, or any combination thereof.

In 1985, the State Board of Education defined the mission of public schools in the State of Washington. To help accomplish that mission, the Board adopted goals that are divided into two general categories: goals to guide the educational process, and goals to guide expected student outcomes. The latter address what students should be able to do as a result of the process of education and include:

- Possess and apply the basic skills of language arts.
- Possess and apply the basic skills of mathematics.
- Possess self-understanding and self-awareness.
- Possess and apply knowledge and skills necessary to maintain physical and mental health and well-being.
- Understand and apply thinking and problem-solving skills.
- Possess and apply the knowledge, understanding, and skills needed for full and effective participation in a democratic society.
- Understand and apply concepts and skills in the natural and physical sciences.
- Possess and apply knowledge, skills, and appreciation of the arts and humanities.
- Possess the ability to enter the job market successfully.

- o Understand, value, and apply technological principles and processes.
- o Understand and apply skills needed to initiate and adapt to change in self, society, and environment.

School districts must develop a program of student learning objectives for all courses of study. To assist districts and schools in achieving these goals, program suggestions and curriculum guidelines have been prepared by the Superintendent of Public Instruction in the areas of science, mathematics, physical education and English and language arts. Basically, the curriculum frameworks include general objectives, learner outcomes which describe student learning at the curriculum level, and instructional implications.

Idaho: The Idaho State Board of Education, in the spring of 1984, raised the high school graduation requirements from 18 to 20 units of credits effective for the graduating class of 1988. These are to be fulfilled as follows:

4 English
2 Social Studies
2 Mathematics
2 Science
1-1/2 Physical Education and Health
6 Electives
1/2 Reading
1/2 Speech
1/2 Consumer Education
1 Humanities

Students must achieve a "C" average in 14 of these core mathematics and language arts requirements before a diploma is awarded. In addition, Humanities will increase to two units after 1988, raising the total requirements to 21 units. One of the credits required in Humanities may be satisfied by one of the approved practical arts courses.

Montana: In the spring of 1984, the Montana State Board of Education raised the total number of credit units required for graduation from 16 to 18 units for the graduating class of 1988 and to 20 units for the graduating class of 1989. Course requirements include:

4 Language Arts
1 American History
1/2 American Government (a 2-unit course in American History and American Democracy, which includes a study of government, may be used to meet the American History and Government requirements)
2 Mathematics
1 Science
1 Health and Physical Education
10-1/2 or 10 Electives

In addition, Montana requires that the basic instructional program for each high school shall be at least 16 units of course work to include at least:

4 Language Arts
2 Social Science
2 Mathematics
2 Science
1 Health and Physical Education
1 Fine Arts (Music, Art, Drama)
2 Practical Arts (Home Economics, Industrial Arts, Business Education, Agriculture)
2 Electives

To be funded at high school rates, the basic instructional program for junior high schools, middle schools and grades 7 and 8 must offer:

Language Arts: 3 units in junior high and 2 units for middle school and 7th and 8th grades.

Social Sciences: 3 units in junior high and 2 units in middle school and 7th and 8th grades.

Mathematics: mathematics offerings are to include both algebra and general math in grade 9, 3 units in junior high and 2 units in middle school and 7th and 8th grades.

Science: 3 units in junior high and 2 units in middle school and 7th and 8th grades.

Health and Physical Education: 1/2 unit each year in junior high and 1/2 unit each year in middle school and 7th and 8th grades.

Art: 1/2 unit each year in junior high and 1/2 unit each year in middle school and 7th and 8th grades.

Music: 1/2 unit each year in junior high and 1/2 unit each year in middle school and 7th and 8th grades.

Practical Arts (includes Home Economics, Industrial Arts, Business Education, and Agriculture): 1/2 unit each year in junior high and 1/2 unit each year in middle school and 7th and 8th grades.

Each elementary school in Montana must have a minimum educational program that includes:

Language Arts including reading, literature, writing, speaking, listening, spelling, penmanship, and English.

Arithmetic, written computation, problem solving.

Science, ecology, and conservation.

Social Sciences, including geography, history of the United States, history of Montana, agriculture, and economics. Contemporary and historical traditions and values of American Indian culture may also be included.

Fine Arts, including music and art.

Physical Education.

Safety, including fire prevention as outlined in state statutes.

Health Education.

In addition, the Montana State Department of Education has recently completed a K-12 curriculum "roadmap" of suggested basic competencies. The material is designed to provide the classroom professional some guidance as to when to introduce and develop concepts in each subject area.

Figure 2 displays, in summary form, the minimum high school graduation requirements of states in the Northwest and Hawaii as of November, 1984.

Figure 2

STATE	English/Language Arts	Social Studies	Mathematics	Science	Physical Education Health	Electives	Other	Total	Enacted by	Date of Enactment	Effective for Graduating Class	Notes
Hawaii	4	4	2	2	1-1/2	6	1/2 guidance	20	SBE	1978	1983	
Oregon	3	3-1/2	2	2	2	8	1/2 career development, 1 applied arts, fine arts, or foreign language	22	SBE	4/84	1988	
Washington	3	2-1/2	2	2	2	5-1/2	1 occupational education	18	SBE and put into statute	1983	1989	The State Board added the PE requirement in May 1984.
Idaho	4	2	2	2	1-1/2	6	1/2 reading 1/2 speech 1/2 consumer ed 2 humanities*	20	SBE	Spring 1984	1988	*Humanities will increase to 2 units after 1988 with a total requirement of 21 units. One of the humanities requirements may be satisfied by taking approved practical arts courses.
Montana	4	1-1/2 or ?	2	1	1	10-1/2 or 10		20	SBE	Spring 1984	1986	Total requirements were raised by the State Board in 1984 from 16 to 18 for 1988 graduates and to 20 units for 1986 graduates. Social studies requirement has 2 alternatives.
Alaska	4	3	2	2	1	9		21	SBE	4/84	1985	

Source: Raising Standards in Schools: Problems and Solutions, AASA Critical Issues Report, Patricia Pine, 1984.

IV. THE ROLES OF THE STATE, DISTRICT, AND SCHOOL IN USING CURRICULUM STANDARDS TO IMPROVE STUDENT PERFORMANCE

Across the country, states are actively engaged to various degrees in helping districts and schools implement improved curriculum standards. The ultimate success of these efforts will depend on how effectively the various levels (state, district, and school) work together. It will also be influenced by how the policy, management, and service areas of each level interact.

Policy is that area of an organization in which governing directions are formulated. The success of the policy area is generally measured in terms of the equity of the decisions made, and the work modes may involve negotiating, bargaining, and voting. The management area is primarily concerned with control and coordination. It often measures success in terms of cost efficiency and effectiveness. The service area concentrates mostly on issues of autonomy and self-regulation. Criteria for measuring success in the service area include items such as the quality of instruction and adherence to professional standards. Both state systems and local districts include people who operate in all three areas. Each area in each system has an important role to play in providing quality education. Each operates under different and contrasting principles, success measures, structural arrangements, and work modes. The interaction among these areas across and within state, district, and school levels can create natural conditions of disjunction within state systems and districts as well as between them.

Interactions among the areas are important to consider when looking at the role of the state, the district, and the school in setting

curriculum standards. In the policy area, standards are identified and established; in the management area, the interest is on the accomplishment of tasks and timelines; while in the service area, the focus is on implementation--structuring unit and lesson plans in concert with the state standards. Individuals in each area collect information needed to perform their own roles, but in the process, may ignore or discount information from other sources. This can lead to incompatible conclusions. All areas tend to define as problems only those things affecting their own measures of success, and often one area's solution is another area's problem. These conditions raise several issues when considering the impact of state mandated curriculum standards as a strategy for school improvement. They include:

1. What are the principles, measures, structures, work modes, and norms that can help bridge the areas and create conditions for joint efforts?

2. What are the approaches which can enable the areas to effectively handle tensions between them?

3. As the needs and goals of each area are different, which have precedence and priority in specific aspects of implementation--those of policy, management, or service?

4. What are appropriate strategies for achieving cooperation among parallel areas in state and local systems?

To address these issues, it's important to examine the total context for school improvement efforts. In designing a study of strategies which states are using to support local school improvement, the Education Commission of the States has utilized a conceptual framework for describing the relationship of state strategies and local school

improvement. In the framework, six components of the state and local education system are defined (ECS, 1985):

1. State Environment: state-level political, demographic, policy and practice characteristics that shape state assessment, curriculum guidelines, and instructional materials activities.

2. SEA Curriculum Improvement Efforts: the state's action on curriculum guidelines, selection of instructional materials and student assessment as it is intended to operate to support local curriculum content improvement.

3. School Approach Actually Used: characteristics of the school curriculum alignment of learning objectives, instructional materials and assessment as it actually exists at the school and the actual methods and activities used by the state to help the school make desired curriculum changes.

4. Local Environment: district and school political, demographic, policy and practice characteristics that affect how curriculum change is carried out within schools. This includes the activities of publishers.

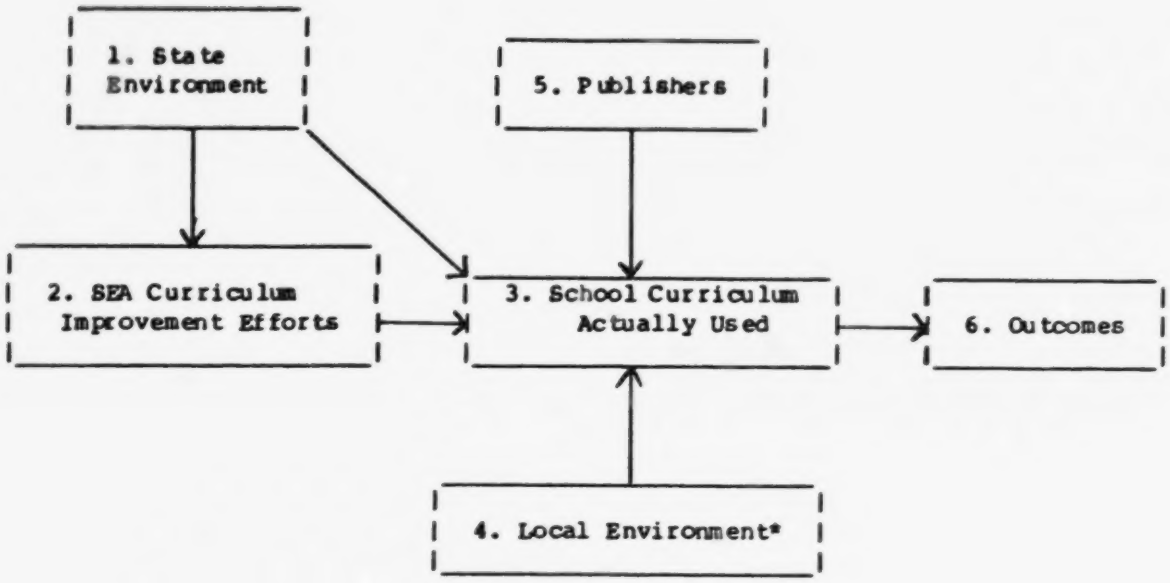
5. Publisher's Influence: the ways and means publishers use to shape the curriculum primarily through the content of instructional materials and tests and their marketing techniques.

6. Outcomes: the results of improved curriculum guides (learning objectives), student assessment and instructional materials for students in terms of increased achievement in both basic skills and broader content, including higher order thinking skills.

The conceptual framework shown in Figure 3 is built on the notion that the state environment (Box 1) shapes the state program (Box 2). However, the actual curriculum used at the local level (Box 3) is further refined and modified by the local environment (Box 4), the influence of publishers (Box 5) and possibly the state environment (Box 1). At this point, the program actually implemented within the local context influences the outcomes within the school (Box 6).

Research would suggest that the tighter the connection between state, district, and building curriculum standards, the higher the likelihood that positive student outcomes will be achieved. The factors described above all influence that connection and need to be taken into account as curriculum policy is implemented.

Figure 3—Conceptual Framework



* The influence of publishers

Source: State Strategies to Support Curriculum and Assessment Content Development at the School and District Level, ECS, 1985.

V. ISSUES AND CONCLUSIONS

Raising curriculum standards may have both positive and negative effects on students. On the positive side, raising curriculum standards may lead to higher levels of achievement. The positive consequences of raising standards for students in American schools can derive only from the greater effort and attention that students might devote to school work in order to achieve at levels higher than those previously demanded (McDill et al., 1985). On the negative side, more students may be caused to fail, thereby increasing the number of dropouts. States, districts, and schools will need to address the potentially negative consequences of raising curriculum standards for students at risk of dropping out. Ultimately, the question is: will implementing raised curriculum standards in response to recent reform commissions and studies have the unintended consequence of increasing dropout rates and such related problems as discipline, violence, and vandalism?

The recommendations to raise curriculum standards outlined in the various commission reports may result in: (1) stratification and less student choice in schools; (2) more conflicts between the demands of schools and other demands placed on students; and (3) more student experience with failure without apparent remedies. These negative effects of raised standards in students remain unresolved issues. Questions for future studies and for states to consider when implementing curriculum reforms include at least the following:

(1) Can state curriculum standards reach <u>all</u> schools, regardless of their state of advancement or resources?

(2) Will state curriculum standards have positive effects on all students, including those now generally described as at-risk?

(3) Can state curriculum standards actually affect classroom practice sufficiently to influence student performance?

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